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(FILE 'HOME' ENTERED AT 16:24:19 ON 06 OCT 2004)

FILE 'REGISTRY' ENTERED AT 16:25:05 ON 06 OCT 2004

FILE 'HCAPLUS' ENTERED AT 16:25:15 ON 06 OCT 2004 L2 TRA L1 1- RN : 19 TERMS

FILE 'REGISTRY' ENTERED AT 16:25:15 ON 06 OCT 2004 L3 19 SEA L2

FILE 'WPIX' ENTERED AT 16:25:19 ON 06 OCT 2004 L4 1 US20030040030/PN

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FILE COVERS 1907 - 6 Oct 2004 VOL 141 ISS 15 FILE LAST UPDATED: 5 Oct 2004 (20041005/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN
     2001:763310 HCAPLUS
AN
DN
     135:300667
ED
     Entered STN: 19 Oct 2001
     Homocysteine assay in a body fluid sample
IN
     Connoly, Caroline; Brady, Jeff
     Axis-Shield ASA, UK
PA
     PCT Int. Appl., 38 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
     ICM G01N033-48
CC 9-2 (Biochemical Methods) FAN.CNT 1
IC
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|--------|---------------|---------------|-----|-----|-----|-------------|-------------|----------|----------------|-----------------|-----|-----|-----|-----|----------|----------|-----|-----|--|
| | PATENT NO. | | | | | | | DATE | | APPLICATION NO. | | | | | | DATE | | | |
| | | | | | | | - | | | | | | | | | | | | |
| | WO 2001077670 | | | | A2 | | 20011018 | | WO 2001-GB1615 | | | | | | 20010410 | | | | |
| | WO | WO 2001077670 | | | | A3 | | 20020516 | | | | | | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | |
| | | | CN, | CO, | CR, | CU, | CZ, | CZ, | DE, | DE, | DK, | DK, | DM, | DZ, | EE, | EE, | ES, | FI, | |
| | | | FI, | GB, | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JΡ, | ΚE, | KG, | ΚP, | |
| | | | KR, | KZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | ΜN, | MW, | MX, | |
| | | | ΜZ, | NO, | ΝZ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SK, | SL, | ТJ, | TM, | |
| | | | TR, | TT, | ΤZ, | ·UA, | UG, | US, | UΖ, | VN, | YU, | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | |
| | | | MD, | RU, | TJ, | TM | | | | | | | | | | | | | |
| | | RW: | GH, | GM, | KΕ, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, | |
| | | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, | |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | G₩, | ML, | MR, | NE, | SN, | TD, | TG | | | |
| | EΡ | EP 1272661 | | | | A2 20030108 | | | EP 2001-919648 | | | | | | 20010410 | | | | |
| | | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | ΙΤ, | LI, | LU, | NL, | SE, | MC, | PT, | |
| | | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR | | | | | | | |
| | JP 2003530574 | | | | | T2 | T2 20031014 | | | JP 2001-574876 | | | | | | 20010410 | | | |
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20020305 <--
     US 2003040030
                            A1
                                   20030227
                                                US 2002-857433
PRAI GB 2000-8784
                            Α
                                   20000410
     WO 2001-GB1615
                                   20010410
CLASS
                   CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 WO 2001077670
                  ICM
                          G01N033-48
     The present invention provides an improved method of assessing/quantifying
     the amount of homocysteine in a body fluid sample via an enzymic assay which comprises reducing background signal by treatment with one of the
     following: a reducing agent, a pyruvate deactivating agent, heat
     treatment, or by lyophilizing or immobilizing the homocysteine converting
ST
     homocysteine assay body fluid
     Reaction
TT
         (Cycling; homocysteine assay in a body fluid sample)
IT
         (Exclusion; homocysteine assay in a body fluid sample)
IT
     Enzymes, uses
     RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical
     process); ANST (Analytical study); PROC (Process); USES (Uses)
         (Homocysteine converting; homocysteine assay in a body fluid sample)
     Thiols (organic), biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (dithiols, binding agent; homocysteine assay in a body fluid sample)
     Immobilization, biochemical
IT
         (enzyme; homocysteine assay in a body fluid sample)
IT
     Blood
     Body fluid
     Centrifugation
     Concentration (condition)
     Cryoprotectants
     Erythrocyte
     Filters
     Filtration
     Freeze drying
     Heat treatment
     Heating
     Liquids
     Molecular sieves
     Neutralization
     Oxidation
     Reducing agents
     Stabilizing agents
     Standard substances, analytical
     Sulfhydryl group
     Test kits
         (homocysteine assay in a body fluid sample)
IT
     Enzymes, uses
     Reagents
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (homocysteine assay in a body fluid sample)
     Proteins, general, analysis
     RL: ARU (Analytical role, unclassified); NUU (Other use, unclassified);
     ANST (Analytical study); USES (Uses)
         (homocysteine assay in a body fluid sample)
     Thiols (organic), biological studies
     RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological
     study); RACT (Reactant or reagent)
         (homocysteine assay in a body fluid sample)
IT
     Enzymes, uses
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
         (immobilized; homocysteine assay in a body fluid sample)
     RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (organic; homocysteine assay in a body fluid sample)
IT
     6027-13-0, Homocysteine
     RL: ANT (Analyte); ANST (Analytical study)
         (homocysteine assay in a body fluid sample)
     53-84-9, NAD 58-68-4, NADH 74-88-4, Methyl iodide, uses 302-6
Hydrazine, uses 541-59-3, Maleimide 3483-12-3, Dithiothreitol 5961-85-3, Triscarboxyethylphosphine 6892-68-8, Dithioerythritol
     9001-05-2, Catalase 9001-60-9, Lactate dehydrogenase 9001-96-1, Pyruvate oxidase. 9014-19-1, Pyruvate carboxylase. 9014-20-4, Pyruvate
     dehydrogenase 9024-41-3, Homocysteine desulfurase
                                                                 9025-03-0,
     Acetoacetate decarboxylase
```

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RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
        (homocysteine assay in a body fluid sample)
     7722-84-1, Hydrogen peroxide, reactions
     RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study);
     RACT (Reactant or reagent); USES (Uses)
        (homocysteine assay in a body fluid sample)
     462-10-2, Homocystine
     RL: ARU (Analytical role, unclassified); ANST (Analytical study)
        (homocysteine assay in a body fluid sample)
     127-17-3, Pyruvic acid, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (homocysteine assay in a body fluid sample)
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FILE 'REGISTRY' ENTERED AT 16:25:58 ON 06 OCT 2004
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provided by InfoChem.
STRUCTURE FILE UPDATES:
                           5 OCT 2004 HIGHEST RN 757166-57-7
                           5 OCT 2004 HIGHEST RN 757166-57-7
DICTIONARY FILE UPDATES:
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004
  Please note that search-term pricing does apply when
 conducting SmartSELECT searches.
Crossover limits have been increased. See HELP CROSSOVER for details.
Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html
=> d ide 13 tot
     ANSWER 1 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
     9025-03-0 REGISTRY
CN
     Decarboxylase, acetoacetate (9CI) (CA INDEX NAME)
OTHER NAMES:
     Acetoacetate decarboxylase
CN
CN
     Acetoacetic acid decarboxylase
CN
     E.C. 4.1.1.4
MF
     Unspecified
     MAN
CI
                  AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, CSCHEM, TOXCENTER,
LC
     STN Files:
       USPATFULL
       Caplus document type: Conference; Dissertation; Journal; Patent
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
       PROC (Process); PRP (Properties); USES (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
       (Process); PRP (Properties); USES (Uses); NORL (No role in record)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
              95 REFERENCES IN FILE CA (1907 TO DATE)
              95 REFERENCES IN FILE CAPLUS (1907 TO DATE)
     ANSWER 2 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
     9024-41-3 REGISTRY
RN
     Desulfhydrase, homocysteine (9CI) (CA INDEX NAME)
OTHER NAMES:
     E.C. 4.4.1.2
CN
CN
     Homocysteinase
CN
     Homocysteine .alpha.,.gamma.-lyase
     Homocysteine desulfhydrase
CN
CN
     Homocysteine desulfurase
MF
     Unspecified
     MAN
CI
                 BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
    STN Files:
DT.CA CAplus document type: Journal; Patent
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
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OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
       Roles for non-specific derivatives from patents: ANST (Analytical
RLD.P
       study); BIOL (Biological study); USES (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
               31 REFERENCES IN FILE CA (1907 TO DATE)
                1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               31 REFERENCES IN FILE CAPLUS (1907 TO DATE)
     ANSWER 3 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
     9014-20-4 REGISTRY
RN
     Dehydrogenase, pyruvate (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
     E.C. 1.2.4.1
CN
     Pyruvate decarboxylase (EC 1.2.4.1)
CN
     Pyruvate dehydrogenase
CN
CN
     Pyruvate dehydrogenase complex
     Pyruvic acid dehydrogenase
CN
     Pyruvic dehydrogenase
CN
MF
     Unspecified
     MAN
CI
     STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
LC
        CA, CABA, CAPLUS, CEN, CHEMCATS, CIN, EMBASE, PROMT, TOXCENTER, USPAT2,
        USPATFULL
DT.CA Caplus document type: Conference; Dissertation; Journal; Patent; Report
        Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
        MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
        (Process); PRP (Properties); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical
        study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP
        (Properties); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
        (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
        (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
        study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU
        (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); USES
        (Uses)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
             3840 REFERENCES IN FILE CA (1907 TO DATE)
               41 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             3843 REFERENCES IN FILE CAPLUS (1907 TO DATE)
     ANSWER 4 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
      9014-19-1 REGISTRY
RN
      Carboxylase, pyruvate (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
     E.C. 6.4.1.1
     Non-acetylating pyruvate carboxylase
CN
CN
      Pyruvate carboxylase
      Pyruvic carboxylase
CN
MF
      Unspecified
CI
      MAN
        TN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CHEMCATS, CIN, EMBASE, NIOSHTIC, PROMT, TOXCENTER,
LC
      STN Files:
        USPAT2, USPATFULL
        CAplus document type: Conference; Dissertation; Journal; Patent; Report
DT.CA
        Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
        OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
        RACT (Reactant or reagent); USES (Uses)
        Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
        (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
        study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU
        (Occurrence); PROC (Process)
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

1652 REFERENCES IN FILE CA (1907 TO DATE)

6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 1652 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 5 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN

L3

9001-96-1 REGISTRY RN Oxidase, pyruvate (9CI) (CA INDEX NAME) CN OTHER NAMES: CN 2-Oxopropanoic acid oxidase E.C. 1.2.3.3 CNPyruvate oxidase CN Pyruvic acid oxidase CN Pyruvic oxidase MF Unspecified MAN CI AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, LC STN Files: CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, MEDLINE, PROMT, TOXCENTER, USPAT2, USPATFULL Other Sources: EINECS** (**Enter CHEMLIST File for up-to-date regulatory information) DT.CA Caplus document type: Conference; Dissertation; Journal; Patent; Report Roles from patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses) Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); PROC (Process); USES (Uses) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** 805 REFERENCES IN FILE CA (1907 TO DATE) 13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 806 REFERENCES IN FILE CAPLUS (1907 TO DATE) ANSWER 6 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN L3 9001-60-9 REGISTRY CN Dehydrogenase, lactate (9CI) (CA INDEX NAME) OTHER NAMES: (S)-Lactate dehydrogenase CN CN E.C. 1.1.1.27 L-Lactate dehydrogenase CN CNL-Lactic acid dehydrogenase L-Lactic dehydrogenase CNCN Lactate dehydrogenase Lactate dehydrogenase NAD-dependent CN Lactic acid dehydrogenase CN Lactic dehydrogenase CN NAD-lactate dehydrogenase CN NADH-dependent lactate dehydrogenase CN Proteins, anoxic stress response, p34 CN 9013-91-6 DR MF Unspecified CI MAN STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PROMT, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data) EINECS**, TSCA** Other Sources: (**Enter CHEMLIST File for up-to-date regulatory information) DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report Roles from patents: ANST (Analytical study); BIOL (Biological study); RL.P CMBI (Combinatorial study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record) Roles for non-specific derivatives from patents: ANST (Analytical RLD.P study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses) Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU RL.NP (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

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RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
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L3
     9001-05-2 REGISTRY
RN
     Catalase (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
     ASC Super
CN
     ASC Super 25
CN
CN
     Caperase
     Catazyme 50L
CN
CN
     E.C. 1.11.1.6
     Equilase
CN
     Fermcolase
CN
     Fermcolase 1000
CN
CN
     HR 200S
     Microcatalase
CN
     Optidase
CN
     Reyonet F 35
CN
CN
     T 100
CN
     T 100 (enzyme)
     Terminox 50L
CN
     Terminox Ultra
CN
     Terminox Ultra 10L
CN
     Unspecified
MF
     COM, MAN
CI
                   ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS,
       BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB,
       IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PHAR, PIRA, PROMT, RTECS*, TOXCENTER, ULIDAT, USPAT2, USPATFULL
          (*File contains numerically searchable property data)
     Other Sources: EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
       CAplus document type: Book; Conference; Dissertation; Journal; Patent;
        Preprint: Report
        Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
        FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
        (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
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RL.NP
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              325 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            27368 REFERENCES IN FILE CAPLUS (1907 TO DATE)
      ANSWER 8 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
      7722-84-1 REGISTRY
      Hydrogen peroxide (H2O2) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Hydrogen peroxide (8CI)
OTHER NAMES:
      Adeka Super EL
CN
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Albone

Albone 35

Albone DS Anti-Keim 50

Asepticper

CN

CN CN

CN

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CN
     CIX
     Crestal Whitestrips
CN
     Crystacide
CN
     Dentasept
     Hioxyl
CN
     Hipox
     Hybrite
CN
     Hydrogen dioxide
CN
CN
     Inhibine
     Lensan A
CN
     Metrokur
CN
     Mirasept
     NSC 19892
CN
CN
     Odosat D
CN
     Oxigenal
CN
     Oxydol
CN
     Oxyfull
     Oxysept
CN
CN
     Oxysept I
CN
     Pegasyl
CN
     Perhydrol
     Perone
CN
     Peroxaan
CN
CN
     Peroxclean
CN
     Select Bleach
     Superoxol
CN
CN
     T-Stuff
CN
     Xtra White
FS
     3D CONCORD
DR
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     H2 O2
MF
CI
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LC
     STN Files:
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU,
       DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
       ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
       MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB
     (*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA
       CAplus document type: Book; Conference; Dissertation; Journal; Patent;
       Preprint; Report
RL.P
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
       CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC
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        in record)
       Roles for non-specific derivatives from patents: ANST (Analytical
        study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation);
        PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES
        (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
        study); CMBI (Combinatorial study); FORM (Formation, nonpreparative);
       MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
        (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
       NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
        study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC
        (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);
       PRP (Properties); RACT (Reactant or reagent); USES (Uses)
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но-он

Baquashock

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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83125 REFERENCES IN FILE CA (1907 TO DATE)
655 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
83277 REFERENCES IN FILE CAPLUS (1907 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
```

```
ANSWER 9 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
     6892-68-8 REGISTRY
RN
     2,3-Butanediol, 1,4-dimercapto-, (2R,3S)-rel- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     2,3-Butanediol, 1,4-dimercapto-, (R*,S*)-
CN
     Erythritol, 1,4-dithio- (8CI)
CN
OTHER NAMES:
     1,4-Dithioerythritol
     Dithioerythritol
     DTE
CN
     erythro-1,4,-Dimercapto-2,3-butanediol
CN
     STEREOSEARCH
FS
     C4 H10 O2 S2
MF
CI
                  AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
LC
     STN Files:
       CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN,
       CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, NIOSHTIC, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2,
       USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
       CAplus document type: Conference; Dissertation; Journal; Patent; Report
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
       PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
       reagent); USES (Uses)
       Roles for non-specific derivatives from patents: ANST (Analytical
       study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or
       reagent); USES (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
RL.NP
       study); PREP (Preparation); PROC (Process); PRP (Properties); RACT
        (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: PREP
        (Preparation); PROC (Process); PRP (Properties); USES (Uses)
```

Relative stereochemistry.

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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
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Other Sources: EINECS**

```
616 REFERENCES IN FILE CA (1907 TO DATE)
                 17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
                616 REFERENCES IN FILE CAPLUS (1907 TO DATE)
     ANSWER 10 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
      6027-13-0 REGISTRY
RN
                                 (CA INDEX NAME)
     L-Homocysteine (9CI)
OTHER CA INDEX NAMES:
     Butyric acid, 2-amino-4-mercapto-, L- (8CI)
CN
OTHER NAMES:
      (S)-2-Amino-4-mercaptobutanoic acid
CN
      (S)-Homocysteine
      2-Amino-4-mercapto-L-butyric acid
CN
      2-Amino-4-mercaptobutyric acid
CN
      Butanoic acid, 2-amino-4-mercapto-, (S)-
CN
CN
     Homocysteine
      NSC 43117
FS
      STEREOSEARCH
      454-28-4, 1867-00-1
DR
      C4 H9 N O2 S
MF
CI
      COM
        N Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
        CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
           (*File contains numerically searchable property data)
```

(**Enter CHEMLIST File for up-to-date regulatory information) DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Report

Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU RL.NP (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT

(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5016 REFERENCES IN FILE CA (1907 TO DATE) 83 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 5036 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 11 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN L3 5961-85-3 REGISTRY CN Propanoic acid, 3,3',3''-phosphinidynetris- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: Propionic acid, 3,3',3''-phosphinidynetri- (7CI, 8CI) CN OTHER NAMES: 3,3',3''-Phosphinidynetripropionic acid 3,3',3''-Phosphinidynetris[propanoic acid] CN CN Phosphine, tris(2-carboxyethyl)-CN TCEP Tris(2-carboxyethyl)phosphine CN CN Tris(carboxyethyl)phosphine FS 3D CONCORD C9 H15 O6 P MF

CICOM LC STN Files:

CASREACT, MEDLINE, MRCK*, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data)

CAplus document type: Conference; Journal; Patent

DT.CA Roles from patents: ANST (Analytical study); BIOL (Biological study); RL.P PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

ANABSTR, BEILSTEIN*, BIOSIS, CA, CANCERLIT, CAOLD, CAPLUS,

Roles for non-specific derivatives from patents: ANST (Analytical RLD. P study); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{CO}_2\text{H} \\ | \\ \text{HO}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{P}-\text{CH}_2-\text{CH}_2-\text{CO}_2\text{H} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

130 REFERENCES IN FILE CA (1907 TO DATE)

7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 132 REFERENCES IN FILE CAPLUS (1907 TO DATE) 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
ANSWER 12 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
      3483-12-3 REGISTRY
      2,3-Butanediol, 1,4-dimercapto-, (2R,3R)-rel- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
      2,3-Butanediol, 1,4-dimercapto-, (R^*,R^*)-
CN
      Threitol, 1,4-dithio- (7CI, 8CI)
OTHER NAMES:
      (.+-.)-1,4-Dimercapto-2,3-butanediol
CN
      (.+-.)-Dithiothreitol
CN
      1,4-Dithio-DL-threitol
CN
CN
      1,4-Dithiothreitol
      Cleland's reagent
CN
CN
      Dithiothreitol
      DL-1,4-Dimercapto-2,3-dihydroxybutane
CN
      DL-1,4-Dithiothreitol
CN
CN
      DL-Dithiothreitol
CN
      DTT (threitol derivative)
CN
      rac-Dithiothreitol
CN
CN
      Reagents, Cleland's
CN
      Sputolysin
      threo-1,4-Dimercapto-2,3-butanediol
CN
      threo-2,3-Dihydroxy-1,4-butanedithiol
CN
CN
      WR 34678
FS
      STEREOSEARCH
DR
      27565-41-9, 28823-08-7, 214119-27-4
      C4 H10 O2 S2
MF
CI
      COM
                      ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
      STN Files:
LC
      BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**
           (**Enter CHEMLIST File for up-to-date regulatory information)
        Caplus document type: Conference; Dissertation; Journal; Patent;
         Preprint; Report
         Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
         MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP
        (Properties); RACT (Reactant or reagent); USES (Uses)
Roles for non-specific derivatives from patents: ANST (Analytical
RLD.P
         study); BIOL (Biological study); PREP (Preparation); PRP (Properties);
RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
```

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4736 REFERENCES IN FILE CA (1907 TO DATE)
77 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4746 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
(Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT

study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP
(Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
reagent); USES (Uses)

(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical

L3 ANSWER 13 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN

```
541-59-3 REGISTRY
     1H-Pyrrole-2,5-dione (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Maleimide (6CI, 8CI)
CN
OTHER NAMES:
     3-Pyrroline-2,5-dione
     Maleic imide
CN
     NSC 13684
CN
     Pyrrole-2,5-dione
CN
FS
     3D CONCORD
     C4 H3 N O2
CI
LC
     STN Files:
                 AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
       CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2,
       ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA,
       MEDLINE, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
     (*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA
       Caplus document type: Conference; Dissertation; Journal; Patent; Report
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
       MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
       (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
       NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical
       study); BIOL (Biological study); MSC (Miscellaneous); PREP
       (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
       reagent); USES (Uses)
       Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); CMBI (Combinatorial study); FORM (Formation, nonpreparative);
       OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
       RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
       study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation);
       PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES
       (Uses)
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            1943 REFERENCES IN FILE CA (1907 TO DATE)
             685 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1951 REFERENCES IN FILE CAPLUS (1907 TO DATE)
              33 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 14 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
RN
     462-10-2 REGISTRY
     Butanoic acid, 4,4'-dithiobis[2-amino- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Butyric acid, 4,4'-dithiobis[2-amino- (8CI)
OTHER NAMES:
CN
     (RS)-Homocystine
CN
     4,4'-Dithiobis[2-aminobutyric acid]
     Homocystine
     NSC 11337
CN
     NSC 43122
CN
     3D CONCORD
FS
DR
     1866-61-1
```

TN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,

(**Enter CHEMLIST File for up-to-date regulatory information)

(*File contains numerically searchable property data)

NIOSHTIC, PROMT, TOXCENTER, USPAT7, USPATFULL

EINECS**

CHEMINFORMRX, CHEMLIST, CIN, DDFU, DRUGU, EMBASE, IPA, MEDLINE, MRCK*,

C8 H16 N2 O4 S2

Other Sources:

STN Files:

CI

Searched by Noble Jarrell

```
DT.CA Caplus document type: Conference; Dissertation; Journal; Patent
RL.P
        Roles from patents: ANST (Analytical study); BIOL (Biological study);
        OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
        RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation);
        RACT (Reactant or reagent)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
        study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP
        (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
        reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
        study); BIOL (Biological study)
       NH2
                                       NH2
HO2C-CH-CH2-CH2-S-S-CH2-CH2-CH-CO2H
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
               644 REFERENCES IN FILE CA (1907 TO DATE)
                 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
               644 REFERENCES IN FILE CAPLUS (1907 TO DATE)
                13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 15 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
     302-01-2 REGISTRY
RN
     Hydrazine (7CI, 8CI, 9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
     Levoxine
     Nitrogen hydride (N2H4)
CN
CN
     Oxytreat 35
FS
     3D CONCORD
DR
      119775-10-9, 75013-58-0, 31886-26-7
MF
     H4 N2
CT
     COM
        Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
LC
     STN Files:
        CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU,
       DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*,
        SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
          (*File contains numerically searchable property data)
er Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
     Other Sources:
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent;
        Preprint; Report
RL.P
        Roles from patents: ANST (Analytical study); BIOL (Biological study);
        FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
        (Reactant or reagent); USES (Uses); NORL (No role in record)
        Roles for non-specific derivatives from patents: ANST (Analytical
RLD.P
        study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU
        (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
        (Reactant or reagent); USES (Uses)
        Roles from non-patents: ANST (Analytical study); BIOL (Biological
        study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
        (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
        NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
        study); BIOL (Biological study); CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence);
        PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or
        reagent); USES (Uses)
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 H_2N-NH_2

^{**}PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

```
21356 REFERENCES IN FILE CAPLUS (1907 TO DATE)
                 3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 16 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
     127-17-3 REGISTRY
RN
     Propanoic acid, 2-oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Pyruvic acid (8CI)
OTHER NAMES:
     .alpha.-Ketopropionic acid
     2-Oxopropanoic acid
CN
     2-Oxopropionic acid
CN
     Acetylformic acid
CN
CN
     BTS
CN
     NSC 179
CN
     Pyroracemic acid
     3D CONCORD
FS
     1892-67-7
DR
MF
     C3 H4 O3
CI
     COM
       ON Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,
     STN Files:
LC
       DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*
        PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2,
       USPATFULL, VETU, VTB
          (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent;
       Report
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
        CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC
        (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);
        PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role
        in record)
RLD.P
       Roles for non-specific derivatives from patents: ANST (Analytical
        study); BIOL (Biological study); CMBI (Combinatorial study); FORM
        (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
        study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU
        (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT
(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
        study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC
        (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);
        PRP (Properties); RACT (Reactant or reagent); USES (Uses)
   - c-- со<sub>2</sub>н
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            22323 REFERENCES IN FILE CA (1907 TO DATE)
               283 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            22347 REFERENCES IN FILE CAPLUS (1907 TO DATE)
                 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 17 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
     74-88-4 REGISTRY
     Methane, iodo- (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
     Iodomethane
CN
     Methyl iodide
Methyl iodide (CH3I)
CN
```

CN

CN

FS

Monoiodomethane

3D CONCORD

21331 REFERENCES IN FILE CA (1907 TO DATE)

1454 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

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147937-07-3
DR
     C H3 I
MF
CI
     COM
       N Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
     STN Files:
       CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*,
       EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT,
       NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, TOXCENTER, TULSA,
       ULIDAT, USPAT2, USPATFULL, VTB
          (*File contains numerically searchable property data)
                      DSL**, EINECS**, TSCA**
     Other Sources:
          (**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent;
       Preprint; Report
       Roles from patents: ANST (Analytical study); BIOL (Biological study);
RL.P
       CMBI (Combinatorial study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process);
       PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role
       in record)
       Roles for non-specific derivatives from patents: ANST (Analytical
RLD.P
       study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
       study); CMBI (Combinatorial study); FORM (Formation, nonpreparative);
       MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
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       NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical
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              293 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            18077 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 18 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
L3
     58-68-4 REGISTRY
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     Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with
CN
      1,4-dihydro-1-.beta.-D-ribofuranosyl-3-pyridinecarboxamide (9CI)
      INDEX NAME)
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CN
      .beta.-NADH
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      1,4-Dihydronicotinamide adenine dinucleotide
CN
      Codehydrase I, reduced
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CN
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      Coenzyme I, reduced
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      Cozymase I, reduced
CN
CN
     Dihydrocodehydrogenase I
CN
     Dihydrocozymase
      Dihydronicotinamide adenine dinucleotide
CN
      Dihydronicotinamide mononucleotide
CN
CN
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CN
     NADH
CN
CN
      Nicotinamide-adenine dinucleotide, reduced
      Reduced codehydrogenase I
CN
      Reduced diphosphopyridine nucleotide
CN
CN
      Reduced nicotinamide adenine diphosphate
      Reduced nicotinamide-adenine dinucleotide
CN
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FS

STEREOSEARCH

DR 443892-10-2

MF C21 H29 N7 O14 P2

CI COM

STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST,
CIN, CSCHEM, DDFU, DRUGU, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB,
MRCK*, NIOSHTIC, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

- DT.CA Caplus document type: Book; Conference; Dissertation; Journal; Patent; Report
- RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
- RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)
- RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
- RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

Absolute stereochemistry.

PAGE 1-B

PAGE 1-A

__NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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245 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
12968 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

- L3 ANSWER 19 OF 19 REGISTRY COPYRIGHT 2004 ACS on STN
 - N 53-84-9 REGISTRY
- CN Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium, inner salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

- CN Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium hydroxide, inner salt
- CN Pyridinium, 3-carbamoyl-1-.beta.-D-ribofuranosyl-, hydroxide, 5'.fwdarw.5'-ester with adenosine 5'-(trihydrogen pyrophosphate), inner salt (8CI)

OTHER NAMES:

- CN .beta.-Diphosphopyridine nucleotide
- CN .beta.-NAD

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     Codehydrogenase I
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     Coenzyme I
CN
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CN
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        Report
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Absolute stereochemistry.

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13914 REFERENCES IN FILE CAPLUS (1907 TO DATE)
129 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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AN
     2001-657186 [75]
                        DNC C2001-193400
    N2001-489848
DNN
     Assay for determining the homocysteine levels in patients involves
TI
     contacting a sample with an agent, which binds, oxidizes or depotentiates-
     a reducing agent after being contacted with homocysteine desulfurase.
     B04 B05 S03
DC
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IN
     (AXIS-N) AXIS SHIELD PLC; (BRAD-I) BRADY J; (CONN-I) CONNELLY C
PA
CYC
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                     W 20031014 (200368)
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     JP 2003530574
     WO 2001077670 A2 WO 2001-GB1615 20010410; AU 2001046709 A AU 2001-46709
     20010410; EP 1272661 A2 EP 2001-919648 20010410, WO 2001-GB1615 20010410;
     US 2003040030 A1 WO 2001-GB1615 20010410, US 2002-857433 20020305; JP
     2003530574 W JP 2001-574876 20010410, WO 2001-GB1615 20010410
     AU 2001046709 A Based on WO 2001077670; EP 1272661 A2 Based on WO
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PRAI GB 2000-8784
     ICM C12Q001-26; C12Q001-527; G01N033-48; G01N033-68
     ICS G01N021-78
     WO 200177670 A UPAB: 20011220
     NOVELTY - An assay for homocysteine involves contacting a biological fluid
     sample (1) with a reducing agent (2) and subsequently with homocysteine
      desulfurase (3). The sample is contacted with an agent (4) which binds,
      oxidizes or depotentiates (2) after being contacted with (3).
          DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a
     kit for a homocysteine assay comprising
           (1) homocysteine desulfurase (3) preferably (i) in lyophilized form;
     the lyophilisate being substantially free of thiol-containing cryo/lyoprotectants or (ii) in aqueous liquid form further containing a
      dithiol reducing agent (e.g. DTT (dithiothreitol), DTE (dithioerythrol),
      or TCEP (triscarboxyethylphosphine)) and a proteinaceous or
      non-proteinaceous stabilizer);
           (2) a homocyst(e) ine standard (preferably several standards
      containing homocysteine (Hcy) or homocystine at several concentrations);
           (3) reducing agent (2) (e.g. DTT, dithioerythiol, TCEP or methyl
     iodide); and
(4) an agent (4) which binds, oxidizes or depotentiates (2) e.g. an
(breferably maleimide);
      organic disulfide or a dithiol binding agent (preferably maleimide);
           optionally at least one further reagent capable of converting the
      homocysteine conversion product of (3) into a detectable analyte;
```

preferably a pyruvate deactivating agent e.g. hydrazine, acetoacetate

decarboxylase, pyruvate carboxylase, hydrogen peroxide or pyruvate dehydrogenase; optionally a filter for removing pyruvate i.e. a molecular sieve; or capable of removing red blood cells from blood.

USE - For determining homocysteine levels in patients correlated to risk of cardiovascular disease e.g. coronary heart disease, coronary artery disease, cerebrovascular disease, or peripherial vascular disorders.

Human blood was collected into vacutainer tubes containing citrate. Plasma was separated from the cells upon centrifugation at 1000 g for 10 minutes at 2 - 8 deg. C. Sample (10 micro 1) was mixed with 0.47% hydrogen peroxide (10 micro 1) and incubated at room temperature for 3 minutes. Enzyme reagent 1 (containing homocysteine desulfurase (0.02 U/ml), lactate dehydrogenase (20.8 micro g/ml), nicotinamide adenine dinucleotide (NADH) (50 micro M), cryo/lyoprotectant (trehalose, gelatine, maltose, dextran, mannitol, tween 20 or caseine) (0.8 wt, %), phosphate buffer (pH 8) (0.1 M), catalase (300 U/ml)) (25 micro 1) was added and incubated for 30 minutes at 37 deg. C. 10 micro l of the same sample was mixed with 0.47% hydrogen peroxide and incubated at room temperature for 3 minutes. Blank reagent 1 was added and incubated for 30 minutes at 37 deg. C. Following this incubation reagent 2 was added to each and after mixing they were incubated for further 3 minutes at room temperature. Reagent 2 contained the DTT (dithiothreitol) binding agent and the acid destroyed the excess NADH. A reagent 3 was added and incubated at 37 deg. C for 15 minutes. The reaction was stopped by the addition of 6M HCl (15 micro 1) and the sample was read at 550 nm. The reading obtained for the sample treated with blank reagent 1 was subtracted from the reading for the sample treated with enzyme reagent 1. The pretreatment of samples with hydrogen peroxide and the absence of catalase in reagent 1 for one set of samples were used as control.

The samples were assayed in the presence and absence of H2O2/catalase. The reduction in background had improved the precision of the assay by decreasing the % CV (coefficient or variance). The results demonstrated that the background was reduced when samples were assayed in the presence of hydrogen peroxide and catalase.

ADVANTAGE - The assay reduces the background levels, i.e. the signal generated by performance of the assay in the absence of the homocysteine conversion enzyme. The improved assay determines the homocysteine levels in patients.

Dwg.0/3 FS CPI EPI FA AB: DCN

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MC CPI: B04-L01; B05-C08; B10-B02D; B11-C08E3; B12-K04A2

EPI: S03-E14H

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